

those animals that require much feeding ; though none require much, if the water is properly changed and a spare tub of water kept for cleansing purposes.

A very beautiful vivarium might be made, having on rocks and shells as many varieties of zoophytes as could be procured, the only large objects to be the *A. dianthus*, which requires no feeding, and is found of such beautiful colours ; the *Delesseria* and other striking Algæ might be introduced with effect, and I will vouch for its attraction.

Were I nearer to you, I should have much pleasure in being at your meetings. I have written to a friend dredging in Scotland to send home all the small Crustacea, among which you may possibly find something.

Yours very sincerely,

C. S. HARRIS.

PROCEEDINGS OF LEARNED SOCIETIES.

ZOOLOGICAL SOCIETY.

January 11, 1853.—Dr. J. E. Gray, V.P., in the Chair.

ON A NEW SPECIES OF SALAMANDER FROM CALIFORNIA.

BY J. E. GRAY, PH.D., F.R.S., V.P.Z.S.

Mr. Henry Gurney most kindly sent to the Zoological Society for exhibition some Reptiles, from Monterey in California, with the desire that the specimens should afterwards be placed in the British Museum. Among the rest was a very fine and large specimen of a Triton, which has much the external appearance of the large white-spotted *Ambystoma Carolinæ* of the eastern part of the United States of America. On more minute examination and comparison, it proved to be quite distinct ; and as I do not find any description of it in any of the American papers on these animals, I have sent a comparative description of the two species.

1. AMBYOSTOMA CAROLINÆ, Gray, Cat. Amph. B. M. 35.

Brown ; small spot over orbit, large spot on each side the occiput, on each leg near the joint, and a series down each side of the back and tail, white ; palatine teeth in a short, nearly straight line, between and not reaching to the internal nostrils, and with a separate small group of teeth behind each internal nostril.

2. AMBYOSTOMA CALIFORNIENSE.

Black ; sides of lips, lower part of neck, body and tail, and limbs, with large white spots ; palatine teeth in an elongated angular transverse line, bent forwards in the middle and extending to the outer edge of the hinder part of the internal nostril.

Hab. California, Monterey, in a well (*Gurney*).

A smaller white spot on each side of the back, not symmetrical ; the one on the right side being much in front of the other.

Ambystoma punctulatum, Gray, Cat. Amph. B. M. 37, has the

tongue free on the side, and is nearly allied to the genus *Plethodon*: the palatine teeth are very indistinct, not forming a regular ridge.

DESCRIPTION OF A NEW SPECIES OF TORTOISE (*TESTUDO PLANICEPS*), FROM THE GALAPAGOS ISLANDS.

By J. E. GRAY, PH.D., F.R.S., V.P.Z.S., P.B.S. ETC.

After the examination of the specimens of the large Black Tortoise (*Testudo Indica*) in the various English and continental collections, including the specimens which had served Schweiger, Schlegel, Fitzinger, Dumeril and Bibron, and others, as the types of species, I placed them all in the 'Catalogue of the Tortoises, Crocodiles and Amphisbænians in the Collection of the British Museum,' as varieties of a single, very variable species, which had been scattered by man in different tropical parts of the globe. I see no cause to change my opinion with respect to the head now about to be described, even should it prove to be that of a black species, which is possible, as the black species is the only one known which has any affinity to it in point of size. The skull now described was sent to Haslar Hospital, and said to have been taken from a specimen brought from the Galapagos Islands. The Black Tortoise of those islands has been described by Dr. Harlan under the name of *Testudo elephantopus*; but his figure and description so exactly agree with the adult *Testudo Indica*, and the specimen in the Gardens of the Zoological Society brought from the Galapagos Islands, is so exactly similar to the specimen of *Testudo Indica* from the Mauritius, that I cannot think that the usual Galapagos Tortoise is different from that species, or like the skull here noticed. I therefore propose to designate this species by the provisional name of *Testudo planiceps*. The following comparative statement of the characters presented by this skull and that of *T. Indica*, will show the differences which exist between them.

TESTUDO INDICA.

Skull high, convex.
Forehead convex, rounded to the nose-cavity; broad between the eyes.
Temples flat behind.

Cheeks small, four-sided.
Edge of the jaw between the nose-cavity and the mouth narrow and rounded.
Nose-cavity oblong, nearly twice as high as broad, contracted on each side above.
Palate broad, oblong, very deeply concave, and with concave converging sides in front.

TESTUDO PLANICEPS.

Skull much-depressed, flat.
Forehead flat, with a rapid declivity towards the nose-cavity; narrow between the eyes.
Temples produced, bent in behind.
Cheeks large, subtrigonal.
Edge of the jaw between the nose-cavity and the mouth high and erect.
Nose-cavity nearly square, scarcely higher than broad, and very little contracted above.
Palate narrow, nearly lozenge-shaped, truncated behind, rather deeply concave, with straight converging sides in front.

TESTUDO INDICA.

Sphenoid bone deeply concave beneath, under the condyle.
Lower jaw narrowed and rounded in front, not more than half as high as behind.

TESTUDO PLANICEPS.

Sphenoid bone flat beneath, under the condyle.
Lower jaw convex and erect in front, and as high as behind.

These descriptions are taken from skulls of nearly the same size, as proved by the following measurements:—

	<i>T. Indica.</i>	<i>T. planiceps.</i>
Length from condyle to front of lip	$5\frac{3}{8}$	$5\frac{1}{8}$
——— from occipital crest to nose-cavity . . .	$5\frac{2}{8}$	$5\frac{6}{8}$
——— of palate concavity	$3\frac{3}{8}$	$2\frac{6}{8}$
Width at condyles	4	$4\frac{1}{2}$
——— at ends of temporal bones	$4\frac{1}{8}$	$3\frac{7}{8}$
——— of palate concavity in middle	$1\frac{3}{8}$	1
——— between orbits	2	$1\frac{2}{8}$
Height from back of upper lip to top of head	$2\frac{5}{8}$	$1\frac{6}{8}$
——— of front of lower jaw	$\frac{5}{8}$	1
Length of nasal opening	2	$1\frac{1}{16}$

January 25.—Dr. Gray, F.R.S., Vice-President, in the Chair.

DESCRIPTIONS OF TWO NEW BIRDS, FROM FERNANDO PO.

BY LOUIS FRASER.

BUBO POENSIS, FRASER.

Brownish yellow, each feather barred with brown, the brown predominating on the crown, shoulders and middle of the back; tail above barred with brown and greyish brown alternately; twelve bars of each colour.

Total length 16 inches; gape, $1\frac{3}{8}$; wing, 12; tail, 7; tarsi, $1\frac{3}{4}$.

Hab. Fernando Po.

Killed in June. The specimen from which the above description was taken is the only one that has been seen by the town's-people; consequently I presume it is very scarce, at least in this part (Clarence) of the island. The natives say it destroys fowls, which here roost in the trees.

Native name 'Okó.' This is evidently a generic term, as the same name is applied to my *Strix Poensis*.

BUCEROS POENSIS, FRASER.

Female by dissection. Head and neck maroon, the feathers of the head standing out in apparent disorder, as in *Buceros comatus*; the rest of the plumage black, the back and tail having bronze reflections; the four outer tail-feathers terminated with white.

Cere cærulean-blue; upper part of throat-sac French-white, middle a blending of French-white and blue, terminated with cærulean-blue; these fleshy parts are much wrinkled; legs and feet deep blue.

Total length 30 inches; gape, 6; wing, $14\frac{1}{2}$; tail, 13; tarsi, $1\frac{3}{4}$.

Hab. Fernando Po.

Killed in the month of July, in deep moult.

Native name, 'Oon-cot-to.' The natives say it cries, as it flies, 'How-oo-ar, how-oo-ar, how-oo-ar.' Very shy. Makes its nest in holes of very large trees, in the dry season; lays two eggs. These birds used to be common in the neighbourhood of Clarence, but since the introduction of guns they have been much shot, and have retired to the mountain.

Palm oil nuts, only, were found in the gizzard, which was soft, almost like a stomach; skin very thin and difficult to prepare. Between the skin and body appeared to be air-cells.

The male is said to differ materially, but I have not been fortunate enough to procure a specimen.

February 8.—John Gould, Esq., F.R.S., in the Chair.

MONOGRAPH OF THE GENUS *ÆGOSOMA*, SERVILLE, WITH THE DESCRIPTION OF A NEW GENUS AND SPECIES ALLIED TO IT.

BY ADAM WHITE, F.L.S.

The genus *Ægosoma* was formed by M. Serville for the reception of a longicorn beetle, first described by Scopoli under the name of *Cerambyx scabricornis*. In this genus the head is produced behind the eyes into a kind of neck, unlike its congeners, which have the head retracted into the thorax as far as the eyes. The prothorax is trapezoidal and contracted in front; the ovipositor of the female is long and prominent; the antennæ in the males are rough, in the females smooth.

The larva of the European species is found in the trunks of various kinds of trees; the perfect insect, according to M. Mulsant, appears at Lyons in the month of July, and is active at night. M. Serville alludes to a second species, which he had seen in the collection of M. Dejean, where it bore the name *Æg. affine*. In the following little monograph will be found descriptions of five new species, all contained in the collection of the British Museum.

ÆGOSOMA.

Ægosoma, Serv. Ann. Soc. Ent. Fr. i. 162.—*Cerambyx*, p. Scop.—*Prionus*, p. Fabr.

1. *ÆGOSOMA SCABRICORNE*.

Cerambyx scabricornis, Scop. Ent. Carn. 54.

Prionus scabricornis, Fabr. Syst. El. ii. 258; Oliv. Col. iv. t. 11. f. 42. ♀; Latr. R. A. v. p. 108.

Ægosoma scabricorne, Serv. Ann. Soc. Ent. Fr. i. 163; Mulsant, Col. de France, i. p. 24.

Hab. Europe. Coll. Brit. Mus.

2. *ÆGOSOMA SINICUM*, White. *Æg. nigro-brunneum, thorace medio postice recto, scutello apice subelongato*.—Long. lin. 18.

Hab. Shanghai, N. China (Mr. Fortune). Coll. Brit. Mus.

There is a female of this species in the Museum; it comes from Shanghai, and differs but little from the corresponding sex of the *Ægosoma scabricorne*; it is of a darker brown, the posterior margin

of the thorax over the scutellum is straight, and not slightly notched as in that species; the scutellum also is more pointed.

3. *ÆGOSOMA ORNATICOLLE*, White. *Æg. capite et thorace nigris, verrucis minutis scabriusculis; thorace plagis quatuor pilis aureis tectis; elytris obscure ferrugineo-brunneis, sutura (apice spinigera) margineque nigris; antennarum articulis tertio quarto et quinto basi asperis.*—Long. lin. 25.

Hab. E. Indies. Coll. Brit. Mus.

Head black, covered with small warts, with a smooth line down the middle, ending in a small smooth depression in the space between the antennæ. Mandibles strongly punctured, tips and inner edge smooth: antennæ with the basal joint thickly covered with small warts; the third, fourth and fifth scabrous, the projections more distant from each other than they are on the basal joint; sixth and following joints short and smooth. Thorax thickly covered with small warts, with four small spots covered with golden yellow hairs; two of these spots on the fore-margin, two on the posterior margin, somewhat more distant from each other than the two fore ones; the hairs are all more or less directed towards the centre of the spot. Elytra smooth, dull ferruginous brown, the suture and margins black, the suture spined at the apex.

4. *ÆGOSOMA MARGINALE*.

Cerambyx marginalis, Fabr. Syst. El. ii. 280.

Hab. China, Hong Kong (*J. C. Bowring, Esq.*); Cape of Good Hope (*Fabr.*). Coll. Brit. Mus.

5. *ÆGOSOMA CINGALENSE*, White. *Æg. antennarum articulis tertio et quarto scabriusculis et breviter pilosis; thorace spina brevi laterali, dorso excavato; elytris costatis pilisque flavescens tectis, sutura apice mutica.*—Long. lin. 17–20½.

Hab. Ceylon. Coll. Brit. Mus. and Capt. Parry.

Head between and behind the eyes more or less covered with decumbent yellowish hairs; antennæ with the basal joint scabrous and punctured; third joint very long, slightly curved, somewhat rough, and rather thickly covered with short yellowish hairs; fourth joint as long as the fifth and sixth joints taken together, somewhat bent, rather rough, and covered with short yellowish hairs, except at the tip, which is smooth; the fifth and following joints without hairs. Thorax with the sides angled, the angle terminating in a small sharpish spine; the posterior edge margined; middle of the back hollowed out, sides somewhat nodulose; surface punctured and more or less thickly covered with yellowish adpressed hairs. Scutellum with yellowish adpressed hairs. Elytra very long, rather flat, with two or three not very prominent costæ, and rendered less distinct by the yellowish adpressed hairs which more or less thickly cover the surface; end of the elytra gradually rounded off; suture without a spine. Abdomen beneath smooth, shining. Legs compressed, somewhat scabrous, brown, with shortish yellow hairs.

6. *ÆGOSOMA SULCIPENNE*, White. *Æg. thoracis lateribus sub-*

parallelis; elytris tricotatis, apice spina suturali, costis duabus interioribus post medium confluentibus, ad apicem intus curvatis; antennis lævibus, cinnamomeis.—Long. lin. 10–11½.

Hab. E. Indies, Tenasserim (*J. D. C. Packman, Esq.*). Coll. Brit. Mus.

Head smooth, not grooved down the middle, chestnut-brown, with some scattered short yellowish hairs; antennæ smooth, cinnamon-brown; first joint strongly punctured. Thorax straight in front, the sides nearly parallel, the posterior angle somewhat projecting; the surface slightly scabrous, and rather closely covered with short golden yellow hairs. Elytra with three prominent keels, the two inner confluent beyond the middle of the elytra and continued in a single keel, which is bent inwards near the tip; the outer keel somewhat waved and slightly curved at the end; in the space between it and the other there is a shorter and less distinct keel, which about the middle of the elytra passes into small tubercles; the shoulders and sides of the keels and the spaces between them at the base are more or less covered with small tubercles; the spaces between the keels have many short golden yellow adpressed hairs. The spine at the end of the suture is sharp, as is the outer margin of the elytra. Legs compressed, brown.

7. *ÆGOSOMA TIBIALE*, White. *Æg. thoracis lateribus unispinosis, angulis posticis acutis, fere spinosis; elytris lævibus, costa media distincta, alteraque ad suturam abbreviata; suturæ apice spinoso; tibiis crassis, tarsis angustis.*—Long. lin. 18½.

Hab. N. India. Coll. Brit. Mus.

Head short, slightly grooved between the eyes, under side of head rough. Antennæ with the first, second, third and fourth joints thickly covered with small warts. Thorax with a spine on the lateral edge about the middle, separated from the produced, somewhat reflected posterior angle by a rounded sinus; surface covered with small warts and outstanding inconspicuous hairs. Scutellum punctured, with a raised line in the middle of the base. Elytra smooth, dark brown, with a distinct costa running nearly to the tip, and another between that and the suture, vanishing about the middle of the suture; elytra rounded at the tip, the suture with a short spine. Legs with the femora and tibiæ thick, the tarsi narrow.

CYRTONOPS, White, n. g.

Head with largish eyes, which are hardly if at all emarginated. Palpi long, with the terminal joint nearly twice the length of the preceding, obliquely truncated at the tip and covered on each side with shortish hairs*. Antennæ cylindrical, covered with small hairs, third joint not much longer than the fourth. Thorax rather wider than long, the sides angulated. Elytra with the sides nearly parallel. Legs simple; tibiæ compressed, and more or less thickly covered with short hairs.

* In one of the specimens there is a curious malformation of the palpi; from the third joint proceed two longish hairy joints, one of them bent.

CYRTONOPS PUNCTIPENNIS, White. *C. brunneo-cinnamomeus, pilis brevibus erectis flavis tectus; thorace punctato; scutello pilis adpressis tecto. Elytris obscure tricostatis profunde punctatis, punctis longitudinaliter ordinatis.*—Long. lin. 9–11.
Hab. India. Coll. Brit. Mus.

Of a rich cinnamon-brown, closely covered with short erect yellowish hairs. Thorax irregularly punctured, the punctures running into each other and sometimes leaving small smooth spaces. Scutellum rounded at the end, covered with short hairs, which lie close to the surface. Elytra with three rather indistinct longitudinal costæ; surface, except at the tip, with many deep punctures, more or less regularly arranged in lines; between these are smaller punctures, from which proceed the hairs.

EXTRACTS FROM A LETTER BY MR. H. CHURTON, RESPECTING COLLECTIONS IN NEW ZEALAND. COMMUNICATED BY MR. J. STEVENS.

Wanganui, July 24, 1851.

You can form no idea of the great trouble and expense attending a journey such as you recommend in search of the Notornis. In the first place, the nature of the country is such, that it is almost impossible to penetrate in search of anything; they can only be obtained by the merest chance, or from the natives. In most of the places where birds are to be obtained you cannot proceed without cutting your way, and the fern and shrubs are so thick and high, that if a bird rises close to you you cannot see it. This is the case with the Pakeko. I have been frequently in places abounding with them and not got a shot, though they were flying all about me; the Notornis being of similar habit will be equally difficult to obtain. In the next place, I should have to charter a small vessel for two months at least, to take tents, provisions, &c. for myself and men, to be away from home for perhaps three months, and all for the very slight chance of meeting with a very rare bird: perhaps ten years ago, when I did not mind moving, I might have gone, but now I am snug and comfortable here there is no chance of it; so for me the Notornis must remain.

There are *no positively authentic* accounts of living Moas. I have paid some attention to the subject, and have heard nothing yet *that can be relied on*. I think it possible that one species (not the largest) may yet be discovered in the Middle Island, but it will probably be some time first, as even the discovery of that bird will hardly pay a man for undergoing such fatigue and danger as would be necessary if a person went in search for it. See Mr. Brunner's journal, who was eighteen months exploring about 150 miles, and who, had it not been for his native companions, must have been starved if he had twenty lives.

The Kakapo is now pretty well known; it appears to be tolerably abundant on the Middle Island, though probably quite or nearly extinct on this. I have seen several specimens, and the Acheron steamer on her late expedition I believe obtained a great many, as

well as Kiwis, so that, on her return to England, I suppose there will be plenty.

I have had *good accounts* from the natives of a very large Kiwi existing within their memory, but now supposed to be extinct on this island; it is represented as being at least four feet high. Perhaps that may be still found on the other island. There are also names for five or six other good-sized ground birds, such as large rails, &c., lately existing here, but since the introduction of so many dogs and cats, supposed to be extinct. One was shot the other day near the town, of a species of which I had seen but one specimen previously; it may be *Rallus assimilis*, but I have not the skins to compare. There is also, about thirty miles from here, a very pretty little duck or teal, which is not described. These are the only novelties I have seen since my return. I have had several Kiwis brought me, and also a few eggs; I had one for breakfast, which was very good and quite enough for one. I sent one last year to the British Museum.

I have made many inquiries about the extinct native rat, but there are certainly none now to be obtained, though formerly they were so numerous as to form a principal article in feasts, and were considered a very great delicacy; they lived on berries, &c., and were like lumps of fat; it is possible they were a kind of opossum rather than a rat. The last were seen here about ten years ago; but the cats and rats, of which the woods are now full everywhere, have destroyed them all. I think there are two kinds of native mice here; one, a sort of shrew, which my dog formerly often caught in the swamps, but which I have not seen lately; another, a little blackish one, found about fields and gardens; this one I have only seen since my return. The natives do not know it, and confound it with the common house mouse, but I do not think it can be an introduced species, as in that case it would scarcely so quickly be found in thousands over so large a tract of country as that in which it was observed last year (I have seen none lately), but rather believe it to be an indigenous species, which from some unknown cause appeared for a short time in astonishing numbers, and then as strangely disappeared.

Insects are so very few, that they are really not worth the great trouble of looking after. I have seen no new species since my return. I know of only five or six butterflies. The largest land shell *here* is a flat snail, about a quarter of an inch in diameter.

March 8.—Dr. Gray, F.R.S., Vice-President, in the Chair.

ON THE NEST AND EGGS OF *MENURA ALBERTI*.

By JOHN GOULD, F.R.S.

Mr. Gould exhibited a nest and two eggs of *Menura Alberti*, which had been obligingly lent to him for the purpose by Mr. Turner of Sydney. The nest was oven-shaped in form; outwardly constructed of roots, tendrils and leaves of palms, and lined with green mosses. It was about 2 feet in length by 16 inches in breadth, domed over except at one end. The eggs, barely $2\frac{1}{4}$ inches long by $1\frac{3}{4}$ broad,

are of a deep purplish chocolate, irregularly blotched and freckled with a darker colour.

The nest and eggs are deposited in the national collection at the British Museum.

NOTICE OF A PRESUMED NEW SPECIES OF RHINOCEROS,
FROM SOUTH AFRICA.

BY J. E. GRAY, PH.D., F.R.S., V.P.Z.S., P.B.S. ETC.

Colonel Thomas Steele having most kindly presented to the British Museum a pair of horns of a two-horned Rhinoceros, which was discovered in the interior of South Africa by his friend Mr. Oswell, Dr. Gray exhibited the horns; and having pointed out the peculiarity of their form, proposed that they should be provisionally described as belonging to a new species, under the name of *Rhinoceros Oswellii*.



RC. WEST. SC.

The front horn is elongated and thick; but instead of being bent back, as is the general character of *R. bicornis*, or erect, as in *R. simus*, is bent forwards, so that the upper surface is worn flat by being rubbed against the ground. The front horn in the pair exhibited was 31 inches long, flat, square, rough and fibrous in front, rounded and smooth behind. The hinder horn was short, conical and sub-quadrangular; it was 11 inches in length.

Dr. Gray stated that the British Museum possesses a second specimen of a front horn, of a similar curve and form, with a similarly worn front top, of a rather larger size. This formerly belonged to Sir Hans Sloane's Collection; so that this species, like *R. simus*, must have been known to the older travellers.

March 22.—Dr. Gray, F.R.S., Vice-President, in the Chair.

DESCRIPTION OF A NEW SPECIES OF *TETRAOGALLUS*.

BY JOHN GOULD, F.R.S.

Mr. Gould laid upon the table a complete series of all the known species of the genus *Tetraogallus*, viz. the

Tetraogallus Caspius, inhabiting Astrabad, Ghilan, and other parts of Persia ;

Tetraogallus Himalayensis, inhabiting the Himalaya mountains ;

Tetraogallus Altaicus, inhabiting the Altai mountains ;

and a fine new species, lately sent to the Honourable East India Company, from Thibet, by Captain Strachey, which he described under the name of

TETRAOGALLUS TIBETANUS.

Crown of the head, cheeks, back and sides of the neck dark slate-grey, washed with buff on the orbits ; ear-coverts buffy white ; chin, front of the throat and chest white ; upper surface, wings and tail-coverts freckled buff, grey and black, the feathers of the middle of the back and the wing-coverts broadly edged with pale buff ; rump and upper tail-coverts washed with rufous ; primaries greyish brown ; secondaries broadly edged and tipped with white ; breast crossed by a narrow band of grey, freckled with buff and blotched with black ; under surface white ; the feathers of the flanks and lower part of the abdomen narrowly but conspicuously margined with jet-black, forming stripes along those parts of the body ; under tail-coverts black, with a broad stripe of white down the centre ; tail very dark brown, inclining to rufous at the tip ; bill and feet orange-red.

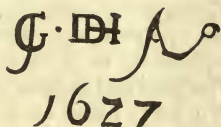
Total length about 15 inches ; bill, $1\frac{1}{4}$; wing, $9\frac{1}{2}$; tail, 5 ; tarsi, $2\frac{1}{2}$.

In the collection of the Honourable East India Company.

April 12.—John Gould, Esq., F.R.S., in the Chair.

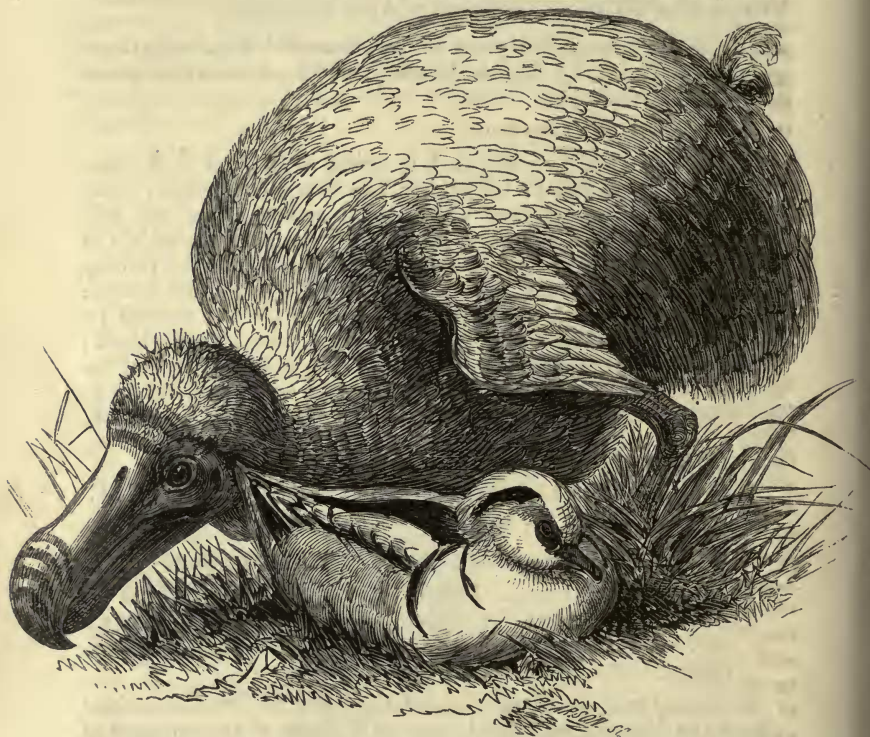
NOTICE OF AN ORIGINAL PAINTING, INCLUDING A FIGURE OF THE DODO, IN THE COLLECTION OF HIS GRACE THE DUKE OF NORTHUMBERLAND, AT SION HOUSE. BY W. J. BRODERIP, V.P.Z.S., F.R.S. ETC.

Professor Owen, at whose disposal the Duke of Northumberland placed the following additional pictorial evidence of the existence of the Dodo in the seventeenth century, has requested me to draw the attention of this Society to the highly interesting picture which the Duke has been so good as to send for the inspection of the Fellows. The size of the picture, which is in the finest preservation, is thirty-two inches by nineteen. It is executed in oil, and bears the following monogram and date. Mr. William Russell, with his usual discernment, detected in this monogram the signatures of Jean Goeimare and Jean David de Heem, and proved the correctness of his judgment by a reference to Brulliot*. Jean



* Dict. des Monogrammes, 1 partie, pp. 274, 201.

Goeimare, who is not noticed by Descamps, Bryan, Sandrart, or Houbraken, is described by Brulliot as a Flemish artist who flourished at the commencement of the seventeenth century, and painted landscapes with many animals, executed with great care, but in rather a dry manner *. Of De Heem, the celebrated painter of still life, it would be superfluous to say anything. We may conclude, then, that in this joint production the landscape and animals were painted by Goeimare, and the shells by De Heem.



In this picture, which seems to have been intended as a record of rarities, the foreground represents a sea-shore from which the tide has retired, leaving empty shells of the following genera :—*Nautilus*, *Pteroceras*, *Strombus*, *Triton*, *Pyrula*, *Cassis*, *Cypræa*, *Conus*, *Mitra*, *Turbo*, *Nerita*, *Mytilus*, *Ostrea*, &c. Behind, on elevated ground, are two ostriches, and below, to the right of the spectator, the Dodo is represented as in the act of picking up something from the strand. The head and body of the bird, covering an area as large as the palm of a man's hand, are seen, but the legs are hidden. The painter of the Dodo in *my* picture, has given the only complete foreshortened

* I am indebted to Mr. Russell for this information.

back view of the bird known to me. In the Duke's picture the head and body are presented to the spectator on a larger scale, and I have nowhere seen the hood or ridge at the base of the bill, from which the bird obtained the name of *Cygnus cucullatus*, so clearly represented. Near the Dodo are a smew and other aquatic birds, and further off hoopers and terns. In the distance is the ocean, with a sea-monster awaiting the attack of Perseus, who descends on a winged steed to the rescue of Andromeda chained to a rock. Those who have had occasion to describe and figure new species of Testacea, know how difficult it is to find a draughtsman who can give a correct design of the shell to be represented. Unless the artist, like Mr. G. B. Sowerby, jun., is aware of the internal structure of the shell, and acquainted with its organization, a lamentable failure is generally the result. In the picture before us, with one exception—and even in that the specimen may have been distorted—so accurate was the eye of the painter, that if he had been aware of the organization of each shell—knowledge which he probably had not—he could not have represented the objects more correctly. The *Nautili**, *Strombus gigas*, *Triton*, and *Pyrula*, are painted with great breadth and power, and all are drawn and coloured with wonderful truth; indeed a conchologist may name every species. One of the *Nautili* is partially uncoated, to show the nacre, and the other dissected, to display the concamerations. None of the shells have the epidermis, and all are of the natural size. The artificial condition of these subjects, and especially of the *Nautili*, is, it must be allowed, rather out of place in an assemblage of testaceans left on the sands by the retired tide, unless we are to suppose that the sea-nymphs had been amusing themselves by polishing the specimens and displaying the internal structure of one of them; but this very treatment shows that the designs were accurately made from real objects then considered as rarities. With the exception of the Dodo, none of the natural objects represented are now rare. The shells, especially those whose *habitats* are the seas of the Antilles, are at present very common; but at the date of the picture—the second year of the reign of our first Charles—the natural productions of the West Indies were not well known, and were, comparatively, very scarce. With the shells on the shore is the cranium of a carnivorous quadruped, apparently of the family *Canidæ*. The monster-cetacean in the distance has evidently no chance with the avenger who is coming down upon him mounted on a winged steed. But Pegasus, who, with other prodigies, sprang from the blood that dropped from Medusa's head, as the conqueror who had cut it off with his harpe traversed the air with his gory trophy, immediately winged its flight to Helicon, there to become the pet of the Muses. The best version of this mythological story relates that when Perseus afterwards killed the sea-monster and delivered Andromeda on the coast of Ethiopia, he effected his purpose by raising himself in the air through the aid of the wings and talaria given to him by Mercury, and not with the help of the winged

* *Nautilus pompilius*.

horse on which most of the painters mount him. Professor Owen informs me that Roland Savery's picture containing the Dodo, in the Berlin collection, bears the date of 1626; and that the colour of the Dodo in the Duke of Northumberland's picture resembles that of the portrait of the bird, of life size, by the same painter, now at Oxford. L'Estrange describes the hue of the back of the living Dodo which he saw exhibited in London "about 1638," as of "dunn or deare colour."

DESCRIPTIONS OF FIVE NEW SPECIES OF HUMMING BIRDS.
BY JOHN GOULD, F.R.S.

Mr. Gould exhibited five new species of Humming Birds; four collected on the eastern slope of the Andes by M. Warzewicz, remarkable for their size and their great beauty, and one lately received by M. Linden of Brussels, from the Sierra Nevada of Santa Martha, at an elevation of 5000 feet. They were described and named as follows:—

1. *HELIANTHEA IRIS*.

Forehead magnificent green, succeeded on the sides by rich orange and in the centre by blue, all with a highly metallic lustre; throat, neck and chest glittering green, with a small gorget of purplish feathers in the centre of the former; posterior part of the body and tail chestnut-red.

Total length, $5\frac{1}{2}$ inches; bill, $1\frac{1}{8}$; wing, $3\frac{1}{2}$; tail, $2\frac{1}{2}$.

Hab. Eastern slope of the Andes.

2. *HELIANTHEA AURORA*.

The whole of the crown rich metallic green; throat and back of the neck also metallic green, but not so lustrous as on the crown; body and tail chestnut-red, as in the preceding species, but not of so deep a hue.

Total length, $5\frac{1}{8}$ inches; bill, $1\frac{5}{16}$; wing, 3; tail, 2.

Hab. Eastern slope of the Andes.

3. *HELIANGELUS VIOLA*.

Throat and upper part of the chest of the most beautiful violet colour; spot on the forehead brilliant verditer-green; neck, back and abdomen green; tail black.

Total length, 5 inches; bill, $\frac{3}{4}$; wing, $2\frac{7}{8}$; tail, $2\frac{1}{2}$.

Hab. Eastern slope of the Andes.

Remark.—Somewhat allied to *Heliangelus Parzudaki*.

4. *TROCHILUS* (—?) *CYANOCOLLIS*.

Crown of the head and sides of the neck greenish blue; upper surface bronzy green; under surface snow-white; tail bronzy green, obscurely crossed near the tip with a dusky band, except the two middle feathers.

Total length, $3\frac{3}{4}$ inches; bill, $\frac{7}{8}$; wing, $2\frac{3}{8}$; tail, $1\frac{1}{2}$.

Hab. Eastern slope of the Andes.

Remark.—Nearly allied to *Trochilus Franciæ*.

5. TROCHILUS (—?) FLORICEPS.

Forehead buffy white, passing into a beautiful deep peach-blossom hue on the crown; throat grey, passing into the rufous of the abdomen; middle tail-feathers bronzy; lateral tail-feathers largely tipped with buff.

Total length, $3\frac{1}{4}$ inches; bill, $\frac{7}{16}$; wing, $1\frac{7}{8}$; tail, $1\frac{5}{16}$.

Hab. Sierra Nevada of Santa Martha, at an elevation of 5000 feet.

LINNÆAN SOCIETY.

February 7, 1854.—Thomas Bell, Esq., President, in the Chair.

Read a "Notice on the Characters and Synonyms of the genus *Senna*." By M. J. B. Battka, of Prague. Communicated by G. Bentham, Esq., F.L.S.

The following are the characters by which M. Battka distinguishes the genus :—

SENNA, *Breyn. Prodr.* ii. p. 59; *Tourn. Inst.* p. 390; *Gærtn. Carp.* ii. p. 312. t. 146.

Calyx 5-sepalus. *Petala* 5, inæqualia. *Filamenta* longiora incurva. *Antheræ* 2-porosæ, 10, supremæ 3 steriles, infimæ 3 radiatæ. *Stigma* centrale. *Legumen* membranaceum, oblongum v. reniforme, latum, foliaceum, plano-compressum, bivalve, pluriloculare, dissepimentis transversalibus; loculis monospermis, non pulposis, ad sedes seminum torulosis. *Semina* albuminosa, rostellata, ad suturam superam leguminis hilo funiculis strictis longioribus affixa, testâ carnosâ, matura et siccata subcordata rugulosa v. scrobiculata, margine hilo et micropyle callosa, appendicula (loco deficientis plumulæ) lirello-cochleariformi ornata; cotyledones foliaceæ, trinerves; radícula recta; plumula nulla.

Under the head of "Petioli eglandulosi; foliola obliqua," M. Battka enumerates four species,—*S. obovata*, *S. acutifolia*, *S. angustifolia*, and *S. tomentosa*, of which he gives the following characters and synonymy :—

1. SENNA OBOVATA, foliis 3-6-jugis; foliolis obovatis vel retuso-obovatis mucronulatis basi angustioribus, stipulis petiolorum lanceolata-linearibus, leguminibus arcuatis supra seminum sedem verticaliter interruptè cristatis.

Senna, *Math. Com.* 571; *Fuchs. Hist.* 447 (1542); *Dod. Pempt.* 360; *Trag. Hist. St.* 964; *Cam. Epit.* 538; *Lob. Adv.* 406; *Dalech. Lugd.* 218; *Burm. Ind.* tab. 33. fig. 2.

S. florentina, *Bauh. Hist.* p. 377 (excl. ram.); *Chabr. Sciag.* 81 et 611.

S. nostras, *Cæs. pl.* 6. c. 34. p. 249.

S. foliis obtusis, *Ger. Hist.* 1297. ic.

S. Espanol, *Solio, Diss. Mad.* 1774, c. ic.

S. Italica, *C. Bauh. Pin.* 397; *Park. Theat.* 225; *Tournef. Inst.* 618; *Ray, Hist.* 1742; *Sloane, Hist. Jam.* 2. p. 47; *Moris. Hist.* ii. p. 201. tab. 24. fig. 2; *Breyn. Prod.* 2. p. 90; *Tabern. Ic.* 903; *Cam. Hort.* m. 159; *Miller, Dict.* n. 2.

S. officinalis, *Gærtn. tab.* 146. fig. 4.

S. hermol, *C. B.*

Sené de Tripoli, *Pomet, Hist. d. Drogues, Uebersetz.* 1717, p. 180.